TASK 110: CORRIDOR LAND USE EVALUATION

Reconstruction of Bridge No. 431 Route 4 Over the Farmington River Farmington, Connecticut

ConnDOT Assignment No. 201-2892 ConnDOT Project No. 170-1857

Prepared for:



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1.0 INTRODUCTION

Maguire Group Inc. was retained by the Connecticut Department of Transportation (ConnDOT) to conduct a Corridor Land Use Evaluation (Task 110) in support of ConnDOT project No. 170-1857, Reconstruction of Bridge No. 431, Route 4 Over the Farmington River in Farmington, Connecticut. The objective of the Corridor Land Use Evaluation is to assess the relative environmental risk associated with current and former land uses in the vicinity of ConnDOT transportation projects, and to determine the need for further evaluation. The environmental risks pertain to the potential presence of hazardous substances or other contaminated materials.

1.1 Project Description

The project involves the reconstruction of Bridge No. 431, Route 4 over the Farmington River in Farmington, Connecticut. The proposed project activities include the removal of the existing concrete deck, steel girders, and concrete substructure. A new concrete deck, sidewalks, and parapets with metal bridge rail will be constructed. The project limits are shown in Figure 1 and a schematic plan of the project corridor is shown in Figure 2. The corridor of land encompassed by this study extends to those properties abutting Route 4 (Farmington Avenue) and its intersecting cross streets.

Based upon a review of the preliminary construction plans, it is anticipated that the project will involve rights-of-way taking, cut and fill activities, drainage structure improvements, and utility realignments.

1.2 Scope of Services

The scope of this evaluation was to perform the following tasks for parcels located within the project corridor:

- conduct an initial site windshield survey,
- review selected municipal land use and environmental records,
- evaluate present and former land uses,
- review select published federal and state environmental lists,
- describe the environmental setting,
- summarize and tabulate present and former land use information, and
- provide a professional opinion regarding the relative environmental risk associated with each parcel and recommendations for further evaluation or investigation, as appropriate.

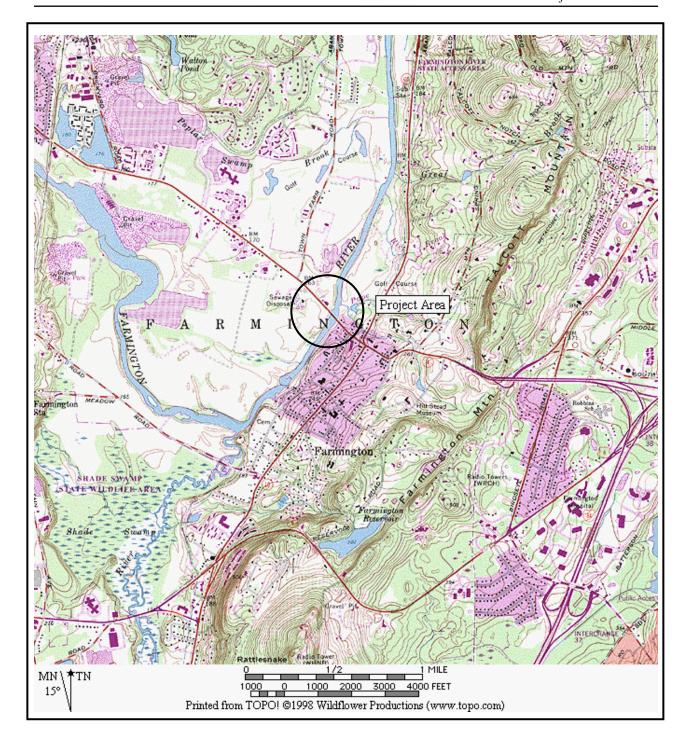
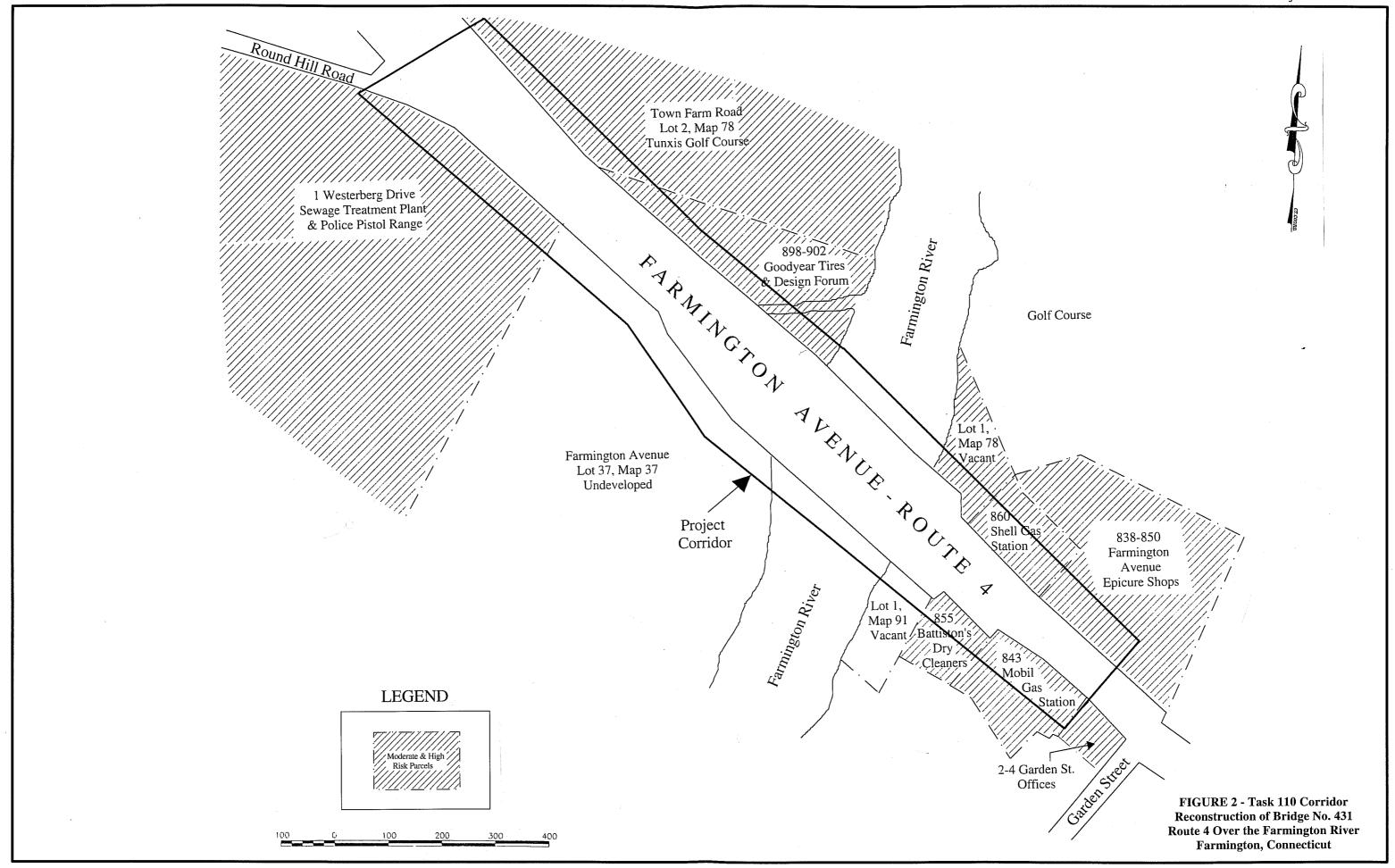


FIGURE 1 - SITE LOCATION PLAN
Reconstruction of Bridge No. 431
Route 4 Over the Farmington River
Farmington, Connecticut



2.0 LAND USE EVALUATION

2.1 Initial Site Survey

An initial site survey of the project corridor was conducted on January 22, 2004 by Cindy Knight of Logical Environmental Solutions. An initial site survey involves obtaining all pertinent information regarding the subject parcels available by site inspection from the public right-of-way. Direct access to the private parcels is typically not available. For this reason, the inspection is limited to characteristics of the property that are visible from the property line, and all areas of environmental concern may not be identified. For example, underground storage tanks or the remote storage of chemicals may not be readily identifiable.

Environmental observations of note are summarized by parcel in the following section and the initial site survey forms completed in the field are included as Appendix A.

2.2 Present Land Use

The present land use of the parcels within the study corridor was evaluated based upon information gathered by the initial site survey, municipal land records, and current city directories.

Land use within the project area consists of industrial, commercial, and undeveloped land. A total of eleven (11) parcels are located within the project corridor. The following describes the eleven properties. Figure 2 depicts the location of each parcel within the project corridor, and Table 1 summarizes the current and past site histories.

Farmington Avenue (Route 4)

838 – 850 Farmington Avenue - Approximate 2.53 acre parcel containing two commercial buildings that comprise the Epicure Shops. The larger building houses a pharmacy, a pizza restaurant, a coffee shop, a salon, a toy store, a jeweler, and a market. The smaller structure houses a bank and real estate office. Both buildings were constructed in 1966 and no environmental concerns were noted.

843 Farmington Avenue - Approximate 0.68 acre parcel that contains a Mobil gasoline service station. The three-bay automotive service garage was constructed in 1960. Two fueling pump islands were also observed on the property.

855 Farmington Avenue - Approximate 0.46 acre parcel that contains a one-story commercial building that was constructed in 1956. The building currently houses Battiston's Dry Cleaners.

Farmington Avenue (Lot 1, Map 91) - Approximate 0.68 acre parcel that consists of undeveloped land. No environmental concerns were noted.

860 Farmington Avenue - Approximate 0.46 acre parcel that contains a Shell gasoline service station. The two-bay automotive repair garage was constructed in 1961. In addition, two pump islands were observed on the property.

Farmington Avenue (Lot 1, Map 78) - Approximate 0.48 acre parcel that consists of undeveloped land. No environmental concerns were noted.

Farmington Avenue (Lot 37, Map 78) - Approximate 77.58 acre parcel that consists of undeveloped land. No environmental concerns were noted.

898 – 902 Farmington Avenue - Approximate 2.25 acre parcel that contains two buildings that were constructed in 1858. The larger building consists of an automotive service garage that currently houses a Goodyear Tire Center. The smaller building currently houses the Design Forum commercial offices.

Garden Street

2-4 Garden Street - Approximate 0.22 acre parcel that contains a two-story building that currently houses insurance offices. The building was constructed in 1955 and no environmental concerns were noted.

Town Farm Road

Town Farm Road (Lot 2, Map 78) - Approximate 14.87 acre lot that contains the Tunxis Golf Course. No environmental concerns were noted.

Westerberg Drive

1 Westerberg Drive - Approximate 28 acre lot that contains the Town of Farmington's Sewage Treatment Plant. The Assessor's field card indicated that the property contained five structures that were built from 1970 to 1994. The field card also indicated that the property housed the Farmington Police Department's pistol range.

2.3 Former Land Use

The site history of the parcels within the project limits was compiled from United States Geological Service (USGS) topographic maps, Hartford Suburban City Directories, aerial photographs, Sanborn Fire Insurance Maps, and the Town of Farmington Tax Assessor's records. The following are former land uses of properties within the project corridor that may have had the potential to store and use chemicals and/or petroleum products on site.

838 Farmington Avenue – This commercial property formerly housed Farmington Cleaners and Laundries from the early 1970's to the early 1980's.

- 843 Farmington Avenue This gasoline service station also formerly housed an oil company from the 1970's to the 1990's.
- 855 Farmington Avenue This property formerly contained a gas station from the 1950's to the 1970's.
- 898 902 Farmington Avenue This property formerly housed a gasoline service station and a car dealership from the 1950's to the 1960's.
- 2-4 Garden Street This commercial property formerly housed offices for the telephone company. The Sanborn Fire Insurance map from 1924 indicated that a gasoline underground storage tank was located on the western side of the building when it was occupied by the telephone company.

Town Farm Road (Lot 2, Map 78) – The aerial photographs indicated that this property may have formerly consisted of farmland.

1 Westerberg Drive (Lot 38, Map 78) – The aerial photographs indicated that this property may have formerly consisted of farmland.

TABLE 1 - Qualitative Site Risk Evaluation Reconstruction of Bridge No. 431 Route 4 Over the Farmington River Farmington, Connecticut

Address	Map/ Lot No.	Owner	Tenant(s)	SIC Codes	Former Use	Risk
	Lot 110.		Pharmacy, Restaurant, Toy	514, 53,		
838 – 850		Woodgreen Epicure	Store, Jewelers, Salon,	54, 58,	Miscellaneous Retail,	
Farmington Avenue	91/2A	Limited Partnership	Market, Coffee Shop, Bank,	59, 60,	Farmington Cleaners &	High
· ·		-	Real Estate Offices	65	Launderers, Residential	
					Oil Company, Paint &	
843	91/3	Mobil Oil Corporation	Mobil Gasoline Service	5541	Wallpaper Store, TV	High
Farmington Avenue			Station		Repairs, Residential	
855						
Farmington Avenue	91/2	Estate of Burton Cohen	Battistons Cleaners	7216	Gas Station, Vacant	High
-		Farmington Village Green				
Farmington Avenue	91/1	& Library Association	Undeveloped	None	None Identified	Low
860			Shell Gasoline Service	5541		
Farmington Avenue	78/2	Motiva Enterprises LLC	Station		Residential	High
Farmington Avenue	78/1	State of Connecticut	Undeveloped	None	None Identified	Moderate
Farmington Avenue	78/37	Town of Farmington	Undeveloped	None	None Identified	Low
898 – 902			Goodyear Tire Center &	5014,	Gasoline Service	
Farmington Avenue	78/1	FBG Associates LLC	Design Forum	73	Station, Car Dealership	High
		Bridge & Canal Streets			Dentist offices, SNET	
2 – 4 Garden Street	91/4	LLC	Insurance Offices	63	Offices	High
					Undeveloped, Possible	
Town Farm Road	78/2	Tomasso Brothers Inc.	Tunxis Golf Course	7992	Farmland	Moderate
			Farmington Sewage			
1 Westerberg Drive	78/38	Town of Farmington	Treatment Plant & Police	4952,	Undeveloped, Possible	High
_			Pistol Range	99	Farmland	

3.0 ENVIRONMENTAL RECORDS REVIEW

3.1 EPA and CTDEP Records

An environmental records review was conducted for selected information from the United States Environmental Protection Agency (USEPA) and the Connecticut Department of Environmental Protection (CTDEP). In addition, an Environmental FirstSearch® Report was requested for the project corridor from FirstSearch® Technology Corporation. A copy of the results of the FirstSearch® report is enclosed as Appendix B in this report. The following environmental record sources were reviewed as part of this Corridor Land Use Evaluation:

Federal NPL list

Federal CERCLA list

Federal RCRA TSD Facilities List

Federal RCRA Generators List

CTDEP Inventory of Hazardous Waste Sites

CTDEP Underground Storage Tank Database

CTDEP Leaking Underground Storage Tank List

CTDEP Permits & Wastewater Discharge Sources

CTDEP Property Transfer Filings Database

CTDEP Administrative Orders Database

CTDEP Oil & Chemical Spills – 1990 to Present

The following summarizes the information found regarding properties within the project corridor:

RCRA Generators List

843 Farmington Avenue: Exxon/Mobil Corporation (EPA I.D. No. CTD983877879) is listed as a small quantity generator of hazardous waste (100 to 1,000 kg/month of hazardous waste generated).

855 Farmington Avenue: Battiston's of Farmington (EPA I.D. No. CTD981893035) is listed as a conditionally exempt small quantity generator of hazardous waste (less than 100 kg/month of hazardous waste generated).

Underground Storage Tank Database

843 Farmington Avenue: The following tanks are registered for the site:

Tank	Date of Installation	Size	Status	Contents	Material
1	1985	12,000-gal	In Use	Gasoline	Fiberglass
2	1985	6,000-gal	In Use	Gasoline	Fiberglass
3	1985	10,000-gal	In Use	Gasoline	Fiberglass
4	1950	500-gal	Removed 1986	Gasoline	Unknown
5	1986	1,000-gal	In Use	Heating Oil	Fiberglass
6	1950	500-gal	Removed 1986	Waste Oil	Unknown
7	1986	1,000-gal	In Use	Waste Oil	Fiberglass

860 Farmington Avenue: The following tanks are registered for the site:

Tank	Date of Installation	Size	Status	Contents	Material
1	1950	10,000-gal	Removed 1987	Gasoline	Steel
2	1987	12,000-gal	In Use	Gasoline	Fiberglass
3	1950	10,000-gal	Removed 1987	Gasoline	Steel
4	1987	12,000-gal	In Use	Gasoline	Fiberglass
5	1950	8,000-gal	Removed 1987	Gasoline	Steel
6	1987	12,000-gal	In Use	Gasoline	Fiberglass
7	1950	550-gal	Removed 1987	Gasoline	Steel
8	1987	1,000-gal	In Use	Waste Oil	Fiberglass
9	1950	550-gal	Removed 1987	Gasoline	Steel
10	1987	1,000-gal	In Use	Heating Oil	Fiberglass

898 – 902 Farmington Avenue: The following tank is registered for the site:

Tank	Date of Installation	Size	Status	Contents	Material
1	1971	550-gal	In Use	Gasoline	Steel

Permits & Wastewater Discharge Sources

1 Westerberg Drive: The Town of Farmington's sewage treatment plant was granted a NPDES discharge permit (CT0100218) in 1996.

Oil & Chemical Spills – 1990 to Present

843 Farmington Avenue: The following spills occurred on the property:

July, 1992: Contaminated soil was encountered during an excavation on the property. The contaminated soil was reportedly stockpiled and removed from the site.

April, 1994: 10-gallons of gasoline spilled due to a motor vehicle accident. The spill was reportedly cleaned up.

August, 1998: 3-gallons of gasoline spilled due to a tank overfill. The spill was reportedly cleaned up.

May, 2000: 4-gallons of gasoline spilled due to a pump failure. The spill was reportedly cleaned up.

July, 2003: 46-gallons of gasoline spilled due to a boat owner filling the boat's live well with gasoline and turning on the bilge pump. The spill was reportedly cleaned up.

860 Farmington Avenue: The following spills occurred on the property:

January, 1997: 3-gallons of gasoline spilled due to a tank overfill. The spill was reportedly cleaned up.

December, 1997: 2-gallons of gasoline spilled due to a fuel tank failure. The spill was reportedly cleaned up.

December, 1999: 2-gallons of gasoline spilled due to a tank overfill. The spill was reportedly cleaned up.

March, 2002: 1-gallon of gasoline spilled due to a tank overfill. The spill was reportedly cleaned up.

May, 2003: Contaminated soil was encountered during a subsurface investigation. The extent and degree of contamination was to be determined.

Farmington Avenue (Lot 1, Map 78): The following spill occurred on the property:

November, 1998: 1-gallon of anti-freeze spilled due to a motor vehicle accident. The spill was reportedly cleaned up.

898 – 902 Farmington Avenue: The following spill occurred on the property:

January, 1992: An anonymous complaint alleged that the tire store was illegally discharging waste oil to the Farmington River. The CTDEP inspector found stained soil adjacent to an aboveground waste oil tank. The property owner was instructed to remediate the contaminated soil.

1 Westerberg Drive: The spill occurred on the property:

April, 1993: A leaking 1,000-gallon fuel oil tank was discovered during an excavation. The tank and the contaminated soil were removed from the property.

4.0 ENVIRONMENTAL SETTING

4.1 Groundwater

According to the Connecticut Department of Environmental Protection's (CTDEP) 1993 Water Quality Classifications for the Upper Connecticut River and South Central Coastal Basins, the groundwater classification for the portion of the project corridor located on the southern side of Route 4, to the west of the Farmington River is "GB". A "GB" groundwater classification indicates that the groundwater may not be suitable for direct human consumption without the need for treatment due to waste discharges, spills or leaks of chemicals, or land use impacts. The groundwater classification for the remainder of the project corridor is "GA". A "GA" groundwater classification indicates that groundwater may be within the area of influence of public and private wells. The groundwater is assumed suitable for direct human consumption without the need for treatment. The properties within the project corridor are connected to the public water distribution system and municipal sewer system.

4.2 Surface Water

The project area is located within the Farmington Regional Basin, within the Connecticut Major Drainage Basin. The Farmington River crosses beneath Route 4 and flows in a southerly direction. The Farmington River is classified as a Class "B" surface water body. A Class "B" classification indicates that the surface water body can be used for recreation, fish and wildlife habitat, agricultural and industrial supply, and other legitimate uses including navigation.

5.0 EVALUATION AND SUMMARY

Identification of current and historic land use formed the basis for a determination of the relative risk of environmental contamination associated with each parcel within the project limits. Each parcel within the project limits was evaluated to determine if it had a low, moderate or high risk of being impacted by a release of hazardous substances or other contaminants. Parcels that appeared to be relatively free of environmental concerns were assigned a low risk, and typically were not recommended for further investigation. Parcels occupied by facilities that are suspected of present or past uses of chemicals, petroleum products, or other potential contaminants were assigned a moderate risk designation. A high risk designation was assigned to parcels with visible signs of chemical release or in which on-site activities conducive to chemical release were noted or suspected. Recommendations for further evaluation, where warranted, were made.

Table 1 summarizes the potential for contamination designation rating for each property within the project corridor. Based on Maguire Group Inc.'s review of parcels within the project limits, the following summarizes the parcels within the corridor that have been identified as having a moderate or high risk of environmental contamination. Two (2) parcels in the project corridor were assigned a moderate risk, and seven (7) parcels were assigned a high risk. The following summarizes the moderate and high risk parcels.

2 Moderate Risk Parcels

Farmington Avenue (Lot 1, Map 78) - This parcel was assigned a moderate risk because a small release of antifreeze spilled on the bridge adjacent to the parcel due to a motor vehicle accident.

Town Farm Road (Lot 2, Map 78) - This parcel was assigned a moderate risk because it may have formerly consisted of farmland.

7 High Risk Parcels

838 - 850 Farmington Avenue - This commercial property was assigned a high risk because it formerly housed a dry cleaning business from the 1970's to the 1980's.

843 Farmington Avenue - This property was assigned a high risk because it contains a Mobil gasoline service station. Seven USTs are registered to the site, and the property is listed as a generator of RCRA hazardous waste. Several spills were also on file for the property. The parcel also formerly housed an oil company.

855 Farmington Avenue – This parcel was assigned a high risk because it has housed the Battiston's Dry Cleaners since the 1980's. Battiston's Cleaners is a generator of RCRA hazardous waste. In addition, the property formerly housed a gas station from the 1950's to the 1970's.

860 Farmington Avenue - This property was assigned a high risk because it houses a Shell gasoline service station. Ten USTs are registered to the site and several spills were on file for the property.

898 - 902 Farmington Avenue - This property was assigned a high risk because it has housed a tire repair garage since the 1970's. The property also housed a gasoline service station and car dealership from the 1950's to the 1960's. One UST is registered to the property, and stained soil adjacent to a waste oil tank was observed on the property by a CTDEP inspector in 1992.

2-4 Garden Street - This property was assigned a high risk because the Sanborn Fire Insurance maps depicted a gasoline UST to the western side of the building. It is not known if the tank was ever removed.

1 Westerberg Drive - This property was assigned a high risk because it houses the Town of Farmington's sewage treatment plant and police pistol range. A spill report from 1993 documented a leaking fuel oil UST. In addition, historical sources indicate that the property may have formerly consisted of farmland.

6.0 CONCLUSIONS

Based upon the information gathered during the windshield survey, a determination of current and former land use, and an environmental review of the parcels within the project limits, it is recommended that a Task 210 - Subsurface Site Investigation be performed in all areas of anticipated intrusive construction activities and/or right-of-way activities on or adjacent to the moderate and high risk parcels discussed in Section 5.0.

7.0 LIMITATIONS

All work products and reports provided by Maguire Group Inc. (MGI) in conjunction with the performance of this Corridor Land Use Evaluation are subject to the following limitations:

The observations described in this report were made under the conditions stated therein. The conclusions presented in the report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the Client.

In preparing this report, MGI has relied upon information provided by State and local officials and information and representations made by other parties referenced therein, and on information contained in the files of State and/or local agencies made available to MGI at the time of the site assessment. To the extent that such files are missing, incomplete, or not provided to MGI, MGI is not responsible. Although there may have been some degree of overlap in the information provided by these various sources, MGI did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this site assessment.

On-site and/or off-site storage tanks and other oil or hazardous material vessels have been described based upon available records and observations.

This report has been prepared for the sole and exclusive use of the Connecticut Department of Transportation, no other warranty, expressed or implied is made.

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8.0 REFERENCES

- 1. Water Quality Classification Map of Connecticut. Connecticut Department of Environmental Protection, Water Compliance Unit, 1993.
- 2. Atlas of the Public Water Supply Sources and Drainage Basins of Connecticut. June 1982, D.E.P. Bulletin No. 4, Connecticut Department of Environmental Protection and Natural Resources Center.
- 3. CTDEP Leaking Underground Storage Tank List. December, 2003.
- 4. CTDEP Underground Storage Tank Database. December, 2003.
- 5. CTDEP Property Transfer Filings Database. April, 2003.
- 6. CTDEP Administrative Orders Database. April, 2003.
- 7. CTDEP Oil & Chemical Spills Database, 1990 to Present, April, 2003.
- 8. *Permits and Wastewater Discharge Sources:* April 2003, Connecticut Department of Environmental Protection, Water Compliance Unit.
- 9. An Inventory of Hazardous Waste Sites in Connecticut and Recommendations for Continuing Action. Connecticut Department of Environmental Protection. January 1987 (Updated to January 30, 1996).
- 10. U.S. EPA/CTDEP Federal Superfund Priority List. April, 2003.
- 11. U.S. EPA Superfund Program CERCLIS Region I. April, 2003.
- 12. U.S. EPA/CTDEP List of TSD Facilities. April, 2003.
- 13. U.S. EPA/CTDEP List of Hazardous Waste Handlers. April, 2003.